03050109-130

(Rabon Creek/Lake Greenwood)

General Description

Watershed 03050109-130 is located in Greenville and Laurens Counties and consists primarily of *Rabon Creek* and its tributaries from its origin to Lake Greenwood. The watershed occupies 81,513 acres of the Piedmont region of South Carolina. The predominant soil types consist of an association of the Cecil-Madison-Davidson-Louisburg series. The erodibility of the soil (K) averages 0.22 and the slope of the terrain averages 15%, with a range of 2-40%. Land use/land cover in the watershed includes: 66.5% forested land, 29.1% agricultural land, 1.9% urban land, 1.3% barren land, 0.8% water, and 0.4% forested wetland (swamp).

South Rabon Creek (Payne Branch, Bullit Branch) and North Rabon Creek (Stoddard Creek, Pumpkin Branch, Mountain Creek, Lick Creek) originate near the Town of Fountain Inn, and join together to form Lake Rabon near the City of Laurens. Lake Rabon is managed by the City of Laurens CPW and is used as a drinking water supply. Rabon Creek (Dirty Creek, Burriss Creek) flows out of the Lake Rabon dam to form an arm of Lake Greenwood further downstream. There are a total of 172.3 stream miles and 842.1 acres of lake waters in this watershed, all classified FW.

Surface Water Quality

Station #	Type	Class	Description
S-859	BIO	FW	MOUNTAIN CREEK AT SR 77
S-321	W	FW	NORTH RABON CREEK AT S-30-32
S-313	W	FW	LAKE RABON, NORTH RABON CREEK ARM, 2.5 MILES UPSTREAM OF DAM
S-860	BIO	FW	SOUTH RABON CREEK AT SR 77
S-322	W	FW	SOUTH RABON CREEK ON DIRT ROAD BETWEEN SC 101 & S-30-76
S-312	W	FW	SOUTH RABON CREEK ARM OF LAKE RABON, DOWNSTREAM OF S-30-312
RL-01014	RL01	FW	LAKE RABON 7.6 MI W OF LAURENS
S-296	P/SPRP	FW	LAKE RABON 300 FEET UPSTREAM OF DAM
S-096	S/INT/BIO	FW	RABON CREEK AT S-30-54, 8.8 MILES NW OF CROSS HILL
S-307	W	FW	RABON CREEK ARM OF LAKE GREENWOOD, 0.8 KM N OF S-30-307

South Rabon Creek - There are two SCDHEC monitoring sites along South Rabon Creek. Aquatic life uses are fully supported at the upstream site (*S-860*) based on macroinvertebrate community data. At the downstream site (*S-322*), aquatic life uses are also fully supported, but recreational uses are not supported due to fecal coliform bacteria excursions.

North Rabon Creek (S-321) - Aquatic life uses are fully supported. Recreational uses are not supported due to fecal coliform bacteria excursions.

Mountain Creek (S-859) – Aquatic life uses are fully supported based on macroinvertebrate community data.

Lake Rabon - Lake Rabon is a 537-acre impoundment on Rabon Creek, with a maximum depth of approximately 27.2 feet and an average depth of approximately 13.1 feet. The lake 's watershed

comprises 89.7 square miles. There are four SCDHEC monitoring sites along Lake Rabon, and aquatic life and recreational uses are fully supported at all sites (*S-313*, *S-312*, *RL-01014*, *and S-296*). At the furthest downlake site (*S-296*), there is a significant decreasing trend in dissolved oxygen concentration. A significant decreasing trend in five-day biochemical oxygen demand suggests improving conditions for this parameter. Prior to 2001, this was a secondary monitoring station and sampling was intentionally biased towards periods with potentially low dissolved oxygen concentrations. P,P'DDT and P,P'DDE, metabolites of DDT, were detected in the 1999 sediment sample. Although the use of DDT was banned in 1973, it is very persistent in the environment.

Rabon Creek (S-096) – Aquatic life uses are fully supported based on macroinvertebrate community data. There is a significant decreasing trend in pH. Recreational uses are partially supported due to fecal coliform bacteria excursions, compounded by a significant increasing trend in fecal coliform bacteria.

Rabon Creek Arm of Lake Greenwood (S-307) - Aquatic life uses are partially supported due to pH excursions. Recreational uses are fully supported.

NPDES Program

Active NPDES Facilities

RECEIVING STREAM

FACILITY NAME

PERMITTED FLOW @ PIPE (MGD)

NPDES#

TYPE

COMMENT

STODDARD CREEK SCG250131

VAN DORN DEMAG CORP. MINOR INDUSTRIAL

PIPE #: 001 FLOW: 0.0004

PAYNE BRANCH SCG250106

BBA FIBERWEB/SIMPSONVILLE MINOR INDUSTRIAL

PIPE #: 001 FLOW: 0.2

MOUNTAIN CREEK SC0032298

S & S WASHERETTE MINOR INDUSTRIAL

PIPE #: 001 FLOW: 0.006

Nonpoint Source Management Program

Land Disposal Activities

Landfill Facilities

LANDFILL NAME PERMIT #
FACILITY TYPE STATUS

SOUTHEASTERN ASSOC. IWP-077
INDUSTRIAL ACTIVE

Land Applications

LAND APPLICATION PERMIT #
FACILITY NAME TYPE

SPRAYFIELD ND0072010
WEISNER SEPTIC TANK CO. DOMESTIC

Water Quantity

WATER USER STREAM	REGULATED CAPACITY (MGD) PUMPING CAPACITY (MGD)
CITY OF LAURENS CPW	9.3
LAKE RABON	17.3
CITY OF LAURENS CPW	2.0
RABON CREEK	5.0

Growth Potential

This watershed contains portions of the Cities of Simpsonville, Fountain Inn, and Laurens and the Town of Gray Court. There is an increasing potential for growth along the I-385 corridor in the eastern portion of this watershed near the greater Laurens area. Many residential subdivisions and industrial sites are being constructed. Agricultural and silvicultural activities are prevalent in the western and central portion of the watershed. U.S. 76 crosses Lake Rabon and the watershed en route to Laurens.